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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, THUAN V	
ART UNIT	PAPER NUMBER
4145	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,312	BEMING ET AL.	
	Examiner	Art Unit	
	THUAN NGUYEN	4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *1-9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *04/06/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, claim 11 contains "comparing the number of data units *currently stored in the buffer* with the number of requested data units; selecting the smaller one of these numbers as a potential number of granted credits from which the number of outstanding credits is subtracted in order to obtain the number of granted credits." However all that the specification discloses is "comparing the number of MAC-d PDUs *that Node B's buffer can accept/receive* and the number of MAC-d PDUs that are pending in the SNRC. Select the smaller number as potential number of granted credits in order to ensure that the allocated capacity never exceeds the amount of requested capacity." (Specification, page 10, lines 27-31.)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-9 are cancelled by the applicant.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art included in the application and Kaminski (US 2006/0009995A1).

6. As per claim 10, admitted prior art teaches "a control method for regulating the flow of data" (Specification, page 2, line 15) "between a first transmitting radio network node and a second transmitting radio network node in a radio transmission network" (Specification, page 2, line 16 teaches Node-B, which is a base station, and a SRNC, which is a radio network controller), comprising the steps of:

"said second transmitting radio network node (Specification, figure 1, element 6) receiving data from said first transmitting radio network node (Specification, figure 1, element 4) to be forwarded to plural user entities (Specification, figure 1, element 7) via an air interface (Specification, figure 1, the Uu interface);" wherein,

"the first transmitting radio network node (SRNC in figure 4) sends a capacity request (Specification, figure 4, element 19) to the second transmitting radio network node (Node-B in Specification, figure 4) requesting the second transmitting radio network node for permission to send an indicated number of data units that are pending in the first transmitting radio network node (Specification, lines 18-20);"

"the second transmitting radio network node (Node-B in figure 4), in response to the capacity request (Specification, figure 4, element 19), sends an allocation frame (Specification, figure 4, element 20, further explained in Specification, page 4, line 15) to the first transmitting radio network node (SRNC in Specification, figure 4), said allocation frame indicating the number of data units the first transmitting radio network node is given permission to transmit (Specification, page 2, lines 21-22), this latter number being referred to as credits (Specification, page 2, lines 23-24);"

"wherein said second transmitting radio network node, if buffer resources for storing of data units at the second transmitting radio network node are limited for a data flow between the first and second transmitting radio network node" (Specification, page 3, lines 18-20 discuss the limits on the buffer size in Node-B), performs the steps of:

"counting the instantaneous number of requested data units;" (Specification, page 4,

lines 7-8 teaches that Node-B learns about the amount of pending user data in SRNC, which is the number of data units in SRNC at the moment SRNC sends out the request.)

"computing the number of credits to be granted" (Specification, figure 4 shows that Node-B allocates capacity in terms of granted credits)..."inserting the number of granted credits so computed in an allocation frame for transmission to the transmitting node in response to the capacity request" (Specification, page 4, lines 15-17).

Admitted prior art in the application does not teach "subtracting from a target buffer filling level the number of data units currently stored in the buffer and the number of credits previously given but not yet received (outstanding credits)". However Kaminski teaches "subtracting from a target buffer filling level (Q_MAX in Kaminski, figure 3) the number of data units currently stored in the buffer (Kaminski, figure 3, element 306) and the number of credits previously given but not yet received (outstanding credits) (Kaminski, figure 3, element 304)." Here it should be noted that even though all the elements in Kaminski, figure 3 applies for multiple data flows since Kaminski, figure 2, element 205 shows that each buffer 205 contains data from multiple data flows UEi, UEj... of element 202 and UEs... of element 204, and figure 3 is buffer 205 shown in detail, figure 3 of Kaminski also applies for a single data flow as a special case where there is only one UE in elements 202 and 204 of Kaminski, figure 2. Thus, it would have been obvious to one of ordinary skill at the time the invention was made to implement

"subtracting from a target buffer filling level the number of data units currently stored in the buffer and the number of credits previously given but not yet received (outstanding credits)" of Kaminski into the admitted prior art in the application since the admitted prior art suggests the calculation of the amount of credits to be granted (something broad) in general and Kaminski suggests the beneficial use of a target buffer filling level, number of data units currently stored in the buffer, and number of outstanding credits to calculate the credits to be granted, such as the number of credits to be granted can be calculated more accurately.

7. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art included in the application, Kaminski (US 2006/0009995A1) and Pietraski (US 2005/0100038A1).

8. As per claim 13, admitted prior art teaches "a control method for regulating the flow of data" (Specification, page 2, line 15) "between a first transmitting radio network node and a second transmitting radio network node in a radio transmission network" (Specification, page 2, line 16 teaches Node-B, which is a base station, and a SRNC, which is a radio network controller), comprising the steps of:

"said second transmitting radio network node (Specification, figure 1, element 6) receiving data from said first transmitting radio network node (Specification, figure 1,

element 4) to be forwarded to plural user entities (Specification, figure 1, element 7) via an air interface (Specification, figure 1, the Uu interface);" wherein,

> "the first transmitting radio network node (SRNC in Specification, figure 4) sends a capacity request (Specification, figure 4, element 19) to the second transmitting radio network node (Node-B in Specification, figure 4) requesting the second transmitting radio network node for permission to send an indicated number of data units that are pending in the first transmitting radio network node (Specification, lines 18-20);"
>
> "the second transmitting radio network node (Node-B in Specification, figure 4), in response to the capacity request (Specification, figure 4, element 19), sends an allocation frame (Specification, figure 4, element 20, further explained in Specification, page 4, line 15) to the first transmitting radio network node (SRNC in Specification, figure 4), said allocation frame indicating the number of data units the first transmitting radio network node is given permission to transmit (Specification, page 2, lines 21-22), this latter number being referred to as credits (Specification, page 2, lines 23-24);"

"wherein said second transmitting radio network node, if buffer resources for storing of data units at the second transmitting radio network node are limited for a data flow

between the first and second transmitting radio network node" (Specification, page 3, lines 18-20 discuss the limits on the buffer size in Node-B), performs the steps of:

"counting the instantaneous number of requested data units in each data flow" (Specification, page 4, lines 7-8 teaches that Node-B learns about the amount of pending user data for each data flow in SRNC, which is the number of data units for each data flow in SRNC at the moment SRNC sends out the request) ..."computing the total number of credits to be granted in each data flow" (Specification, figure 4 shows that Node-B allocates capacity in terms of granted credits).

Admitted prior art does not teach "to obtain a total number of requested data units". However Kaminski teaches "to obtain a total number of requested data units" (Kaminski, figure 2, element 205 shows that each buffer 205 contains data from multiple data flows UEi, UEj... of element 202 and UEs... of element 204. Buffer 205 is shown in detail in Kaminski, figure 3, therefore element 304 of figure 3 represents the granted credits for multiple data flows UEi...UEs. Since the CRNC, which buffer 205 is a part of (Kaminski, figure 2, element 208), grants credits in response to requests (Kaminski, paragraph [0023]), it follows that the CRNC obtains the total number of requested data units from multiple data flows. Thus, it would have been obvious to one of ordinary skill at the time the invention was made to implement "to obtain a total number of requested data units" of Kaminski into the admitted prior art in the application since the admitted prior art suggests the counting of requested data units (something broad) in general, and

Kaminski suggests the beneficial use of counting requested data units in each flow and obtaining the total number of requested data units such as to grant credits more accurately in the analogous art of telecommunications.

Admitted prior art in the application does not teach "subtracting from a target buffer filling level for the total number of data flows the total number of data units currently stored in the buffer and the total number of credits previously given but not yet received." However Kaminski teaches "subtracting from a target buffer filling level for the total number of data flows (Q_MAX in Kaminski, figure 3) the total number of data units currently stored in the buffer (Kaminski, figure 3, element 306) and the total number of credits previously given but not yet received (Kaminski, figure 3, element 304)." Here it should be noted that all elements in Kaminski, figure 3 applies for multiple data flows since Kaminski, figure 2, element 205 shows that each buffer 205 contains data from multiple data flows UEi, UEj... of element 202 and UEs... of element 204, and figure 3 is buffer 205 shown in detail. Thus, it would have been obvious to one of ordinary skill at the time the invention was made to implement "subtracting from a target buffer filling level for the total number of data flows the total number of data units currently stored in the buffer and the total number of credits previously given but not yet received" of Kaminski into the admitted prior art in the application since the admitted prior art suggests the calculation of the amount of credits to be granted (something broad) in general and Kaminski suggests the beneficial use of a target buffer filling level, number of data units currently stored in the buffer, and number of outstanding credits to

calculate the credits to be granted, such as the number of credits to be granted can be calculated more accurately in the analogous art of telecommunications.

Admitted prior art does not teach "distributing the total amount of credits of the receiving node." However Kaminski teaches "distributing the total amount of credits of the receiving node." (Kaminski, figure 2, element 205 shows that each buffer 205 contains data from multiple data flows UEi, UEj... of element 202 and UEs... of element 204. Buffer 205 is shown in detail in Kaminski, figure 3, therefore element 304 of figure 3 represents the granted credits for multiple data flows UEi...UEs. Since the granted credits in Kaminski, figure 3 are for multiple data flows UEi...UEs, and each SRNC has to obtain credit before sending data (Kaminski, paragraph [0022]), it follows that the total amount of granted credits will be distributed among the data flows so that they can start moving data.) Thus, it would have been obvious to one of ordinary skill at the time the invention was made to implement "distributing the total amount of credits of the receiving node" of Kaminski into the admitted prior art in the application since the admitted prior art suggests obtaining credits to send data (Specification, page 2, lines 22-24) (something broad) in general and Kaminski suggests the beneficial use of distributing the credits among different data flows such as the data flows being able to send data more efficiently in the analogous art of telecommunications.

Admitted prior art and Kaminski do not teach "proportionally to the radio channel qualities indicated by the respective user entities." However Pietraski teaches

"proportionally to the radio channel qualities indicated by the respective user entities." (Pietraski, paragraph [0003] teaches that Node-B schedules user's mobile units according to the radio channel quality. The better the channel quality is, the more likely that channel will be scheduled. In addition, a channel is scheduled when it has data buffered (Specification, page 4, lines 29-31), which means credits are distributed to it (Specification, figure 4, element 20) and its data are transmitted to the B-Node (Specification, figure 4, element 21). Therefore credit distribution leads to channel scheduling. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement "proportionally to the radio channel qualities indicated by the respective user entities" of Pietraski into the admitted prior art and Kaminski, since the admitted prior art and Kaminski suggests distributing the total amount of credits of the receiving node (something broad) in general, and Pietraski suggests the beneficial use of distributing credits proportionally to the radio channel qualities such as the credits being used more efficiently in the analogous art of telecommunications.

9. As per claim 15, admitted prior art teaches "a control method for regulating the flow of data" (Specification, page 2, line 15) "between a first transmitting radio network node and a second transmitting radio network node in a radio transmission network" (Specification, page 2, line 16 teaches Node-B, which is a base station, and a SRNC, which is a radio network controller), comprising the steps of:

"said second transmitting radio network node (Specification, figure 1, element 6) receiving data from said first transmitting radio network node (Specification, figure 1, element 4) to be forwarded to plural user entities (Specification, figure 1, element 7) via an air interface (Specification, figure 1, the Uu interface);" wherein,

"the first transmitting radio network node (SRNC in figure 4) sends a capacity request (Specification, figure 4, element 19) to the second transmitting radio network node (Node-B in Specification, figure 4) requesting the second transmitting radio network node for permission to send an indicated number of data units that are pending in the first transmitting radio network node (Specification, lines 18-20);"

"the second transmitting radio network node (Node-B in figure 4), in response to the capacity request (Specification, figure 4, element 19), sends an allocation frame (Specification, figure 4, element 20, further explained in Specification, page 4, line 15) to the first transmitting radio network node (SRNC in Specification, figure 4), said allocation frame indicating the number of data units the first transmitting radio network node is given permission to transmit (Specification, page 2, lines 21-22), this latter number being referred to as credits (Specification, page 2, lines 23-24);"

Admitted prior art does not teach "distributing the number of credits given by the second transmitting radio network node." However Kaminski teaches "distributing the number of credits given by the second transmitting radio network node." (Kaminski, figure 2, element 205 shows that each buffer 205 contains data from multiple data flows UEi, UEj... of element 202 and UEs... of element 204. Buffer 205 is shown in detail in Kaminski, figure 3, therefore element 304 of figure 3 represents the credits granted by the CRNC (Kaminski, figure 2, element 208) for multiple data flows UEi...UEs. Since the granted credits in Kaminski, figure 3 are for multiple data flows UEi...UEs, and each SRNC has to obtain credit before sending data (Kaminski, paragraph [0022]), it follows that the total amount of granted credits will be distributed among the data flows so that they can start moving data.) Thus, it would have been obvious to one of ordinary skill at the time the invention was made to implement "distributing the number of credits given by the second transmitting radio network node" of Kaminski into the admitted prior art in the application since the admitted prior art suggests obtaining credits to send data (Specification, page 2, lines 22-24) (something broad) in general and Kaminski suggests the beneficial use of distributing the credits among different data flows such as the data flows being able to send data more efficiently in the analogous art of telecommunications.

Admitted prior art and Kaminski do not teach "proportionally to the radio channel qualities indicated by the respective user entities to which the second transmitting radio network node is scheduling radio transmission of data units." However Pietraski teaches

"proportionally to the radio channel qualities indicated by the respective user entities to which the second transmitting radio network node is scheduling radio transmission of data units." (Pietraski, paragraph [0003] teaches that Node-B schedules user's mobile units according to the radio channel quality. The better the channel quality is, the more likely that channel will be scheduled. In addition, a channel is scheduled when it has data buffered (Specification, page 4, lines 29-31), which means credits are distributed to it (Specification, figure 4, element 20) and its data are transmitted to the B-Node (Specification, figure 4, element 21). Therefore credit distribution leads to channel scheduling. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement "proportionally to the radio channel qualities indicated by the respective user entities to which the second transmitting radio network node is scheduling radio transmission of data units" of Pietraski into the admitted prior art and Kaminski, since the admitted prior art and Kaminski suggests distributing the total amount of credits of the receiving node (something broad) in general, and Pietraski suggests the beneficial use of distributing credits proportionally to the radio channel qualities such as the credits being used more efficiently in the analogous art of telecommunications.)

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art included in the application, Kaminski (US 2006/0009995A1), Pietraski (US 2005/0100038A1) and Pennington (US Patent Number 5,453,982).

11. As per claim 14, admitted prior art, Kaminski and Pietraski teach claim 13. Admitted prior art, Kaminski and Pietraski do not teach "limiting the total sum of user data in all data streams to a desired value less than or equal to the total requested number or data units." However Pennington teaches "limiting the total sum of user data in all data streams to a desired value less than or equal to the total requested number or data units." (Pennington, column 3, lines 27-32 teaches that the number of allocated credits should not exceed the requested number of credits, i.e. the user data is equal to or less than the requested number of data units for one data stream, therefore the total sum of user data in all streams is equal to or less than the total number of requested data units.) Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement "limiting the total sum of user data in all data streams to a desired value less than or equal to the total requested number or data units" of Pennington into the admitted prior art, Kaminski and Pietraski, since the admitted prior art, Kaminski and Pietraski suggest the total sum of user data in all streams (something broad) in general, and Pennington suggests the beneficial use of limiting the total sum of user data in all streams to not more than the total requested number of data units, such as the data flow control can be more effective in the analogous art of computer communications.

12. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art included in the application and Shimizu (US 2005/0213595A1).

13. As per claim 16, admitted prior art teaches "a radio network node" (Node-B in Specification, figure 4) "for regulating the flow of data" (Specification, page 4, line 4) "from a transmitting node" (SRNC in Specification, figure 4), comprising:

"a buffering resource" (Specification, figure 2, element 9);

"a capacity allocation device for allocating individual amounts of user data to individual user entities" (Specification, figure 2, elements 10 and 11 show the mechanism to request and allocate capacity via the credit request and allocation frames for individual user entities UE1 to UEi);

"a flow control protocol" (Specification, figure 3, element 14) "and a scheduler" (Specification, figure 3, element 16);

The admitted prior art teaches "outstanding credits" (Specification, page 4, lines 8-11 teaches the number of outstanding credits being used to compute allocated capacity) and "outstanding credits being defined as the number of data units that the allocation device has permitted the transmitting node to send, although the corresponding number of data units has not yet arrived at the radio network node." (Specification, page 4, lines 12-13).

The admitted prior art does not teach "wherein the capacity allocation device comprises a counter for keeping a running count of the instantaneous number of ... credits". However Shimizu teaches "the capacity allocation device comprises a counter for keeping a running count of the instantaneous number of ... credits" (Shimizu, paragraph [0043] teaches a counter being used to keep track of the current number of available credits.)

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement "the capacity allocation device comprises a counter for keeping a running count of the instantaneous number of ... credits" of Shimizu into the admitted prior art, since the admitted prior art suggests using the outstanding credits (something broad) in general and Shimizu suggests the beneficial use of a counter to store the current number of credits such as the instantaneous number outstanding credits being available to compute the allocated capacity in the analogous art of telecommunications.

14. As per claim 17, admitted prior art and Shimizu teach claim 16.

Admitted prior art, page 4, lines 7-8, teaches "a running count of user data pending in the transmitting node," i.e. the number of requested credits. Admitted prior art does not teach "the capacity allocation device comprises a counter." However Shimizu teaches "the capacity allocation device comprises a counter" (Shimizu, paragraph [0043]

teaches a counter being used to keep track of the current number of available credits.) Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to "the capacity allocation device comprises a counter" of Shimizu into the admitted prior art, since the admitted prior art suggests the use of pending user data in the transmitting node (something broad) in general and Shimizu suggests the beneficial use of a counter to store the pending number of user data in the transmitting node such as to compute the allocated capacity more efficiently in the analogous art of telecommunications.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art included in the application, Shimizu (US 2005/0213595A1), Kaminski (US 2006/0009995A1) and Pietraski (US 2005/0100038A1).

16. As per claim 18, the admitted prior art and Shimizu teach claim 16.

Admitted prior art and Shimizu do not teach "a distribution device adapted to distribute the total number of credits given by the radio network node." However Kaminski teaches "a distribution device adapted to distribute the total number of credits given by the radio network node" (Kaminski, figure 2, element 205 shows that each buffer 205 contains data from multiple data flows UEi, UEj... of element 202 and UEs... of element 204. Buffer 205 is shown in detail in Kaminski, figure 3, therefore element 304 of figure 3 represents the credits granted by the CRNC (Kaminski, figure 2, element 208) for

multiple data flows UEi…UEs. Since the granted credits in Kaminski, figure 3 are for multiple data flows UEi…UEs, and each SRNC has to obtain credit before sending data (Kaminski, paragraph [0022]), it follows that the total amount of granted credits will be distributed among the data flows so that they can start moving data.) Thus, it would have been obvious to one of ordinary skill at the time the invention was made to implement "a distribution device adapted to distribute the total number of credits given by the radio network node" of Kaminski into the admitted prior art in the application and Shimizu since the admitted prior art and Shimizu suggest obtaining credits to send data (Specification, page 2, lines 22-24) (something broad) in general and Kaminski suggests the beneficial use of distributing the credits among different data flows such as the data flows being able to send data more efficiently in the analogous art of telecommunications.

Admitted prior art and Shimizu do not teach "proportionally to the radio channel qualities indicated by the respective user entities to which the scheduler is scheduling radio transmission of data units." However Pietraski teaches "proportionally to the radio channel qualities indicated by the respective user entities to which the scheduler is scheduling radio transmission of data units." (Pietraski, paragraph [0003] teaches that Node-B schedules user's mobile units according to the radio channel quality. The better the channel quality is, the more likely that channel will be scheduled. In addition, a channel is scheduled when it has data buffered (Specification, page 4, lines 29-31), which means credits are distributed to it (Specification, figure 4, element 20) and its

data are transmitted to the B-Node (Specification, figure 4, element 21). Therefore credit distribution leads to channel scheduling. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement "proportionally to the radio channel qualities indicated by the respective user entities to which the scheduler is scheduling radio transmission of data units" of Pietraski into the admitted prior art and Shimizu, since the admitted prior art and Shimizu suggests distributing the total amount of credits of the receiving node (something broad) in general, and Pietraski suggests the beneficial use of distributing credits proportionally to the radio channel qualities such as the credits being used more efficiently in the analogous art of telecommunications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUAN NGUYEN whose telephone number is (571)270-7189. The examiner can normally be reached on 7:30 AM to 5:00 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on 571-272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T.N.
/Pankaj Kumar/
Supervisory Patent Examiner, Art Unit 4145